Title. SYSTEM AND METHOD FOR PROOF
DOCUMENTS UTILIZING SECURE COMMUNICATIONS
OVER A NETWORK
Inventor: D.A.E. Wall
Docket No.:   YOZO118402
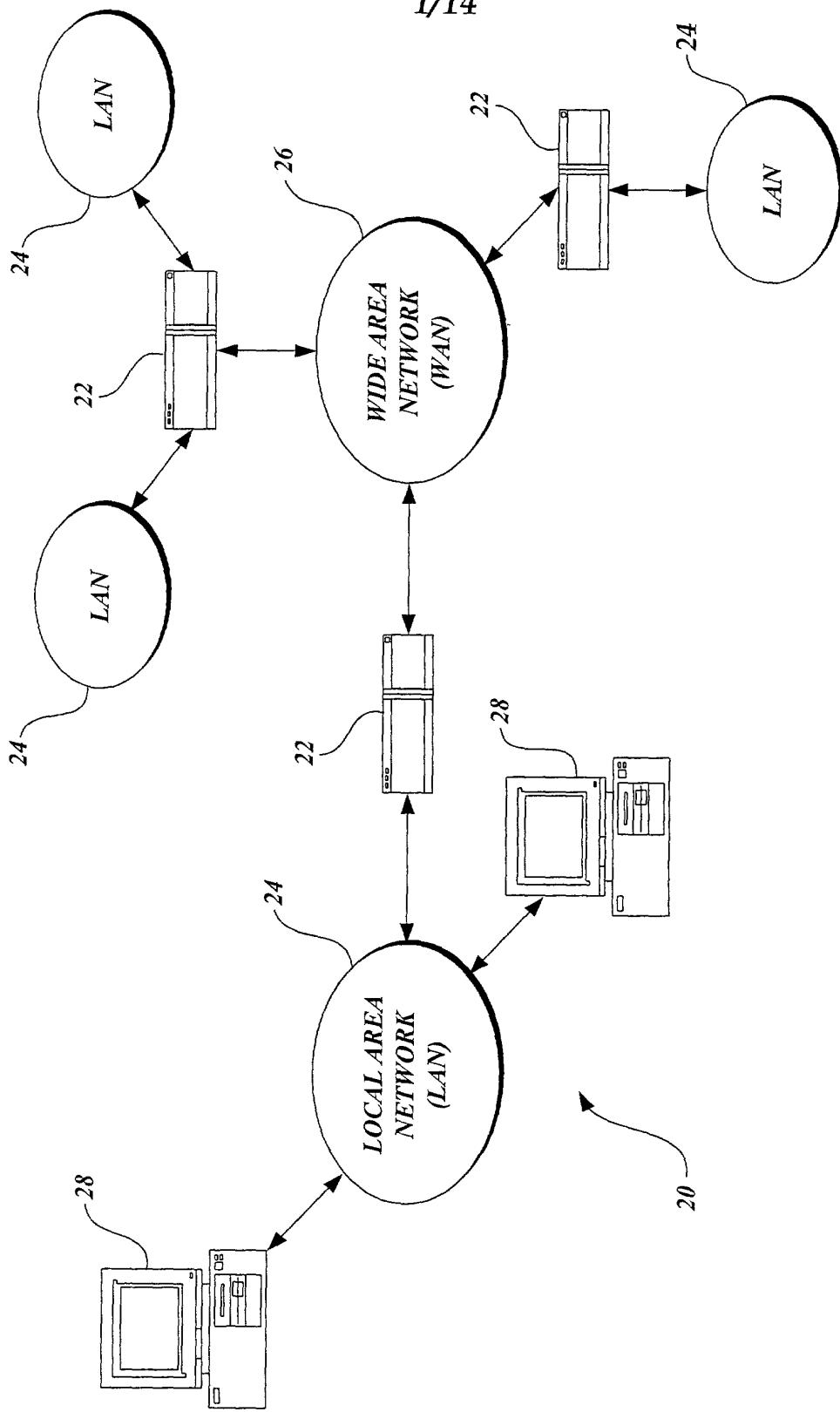U.S. Express Mail No.: EL 919767845 US

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Fig.1.

Title: SYSTEM AND METHOD TO
DOCUMENTS UTILIZING SECURE COMMUNICATIONS
OVER A NETWORK
Inventor: D.A.E. Wall
Docket No.:   YOZO118402
U.S. Express Mail No.: EL 919767845 US

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Fig.2.

Title. SYSTEM AND METHOD FOR PROCESSING
DOCUMENTS UTILIZING SECURE COMMUNICATIONS
OVER A NETWORK
Inventor: D.A.E. Wall
Docket No.:   YOZO118402
U.S. Express Mail No.: EL 919767845 US
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DISPLAY 306

NETWORK INTERFACE 302

PROCESSING UNIT 304

MASS MEMORY 308

OPERATING SYSTEM

BROWSER APPLICATION

310

312

MODEM 300

202

Fig.3.

Title: SYSTEM AND METHOD FOR PROCESSING DIGITAL
DOCUMENTS UTILIZING SECURE COMMUNICATIONS
OVER A NETWORK
Inventor: D.A.E. Wall
Docket No.:   YOZO118402
U.S. Express Mail No.: EL 919767845 US

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Fig. 4.

Title: SYSTEM AND METHOD FOR PROCESSING DIGITAL
DOCUMENTS UTILIZING SECURE COMMUNICATIONS
OVER A NETWORK
Inventor: D.A.E. Wall
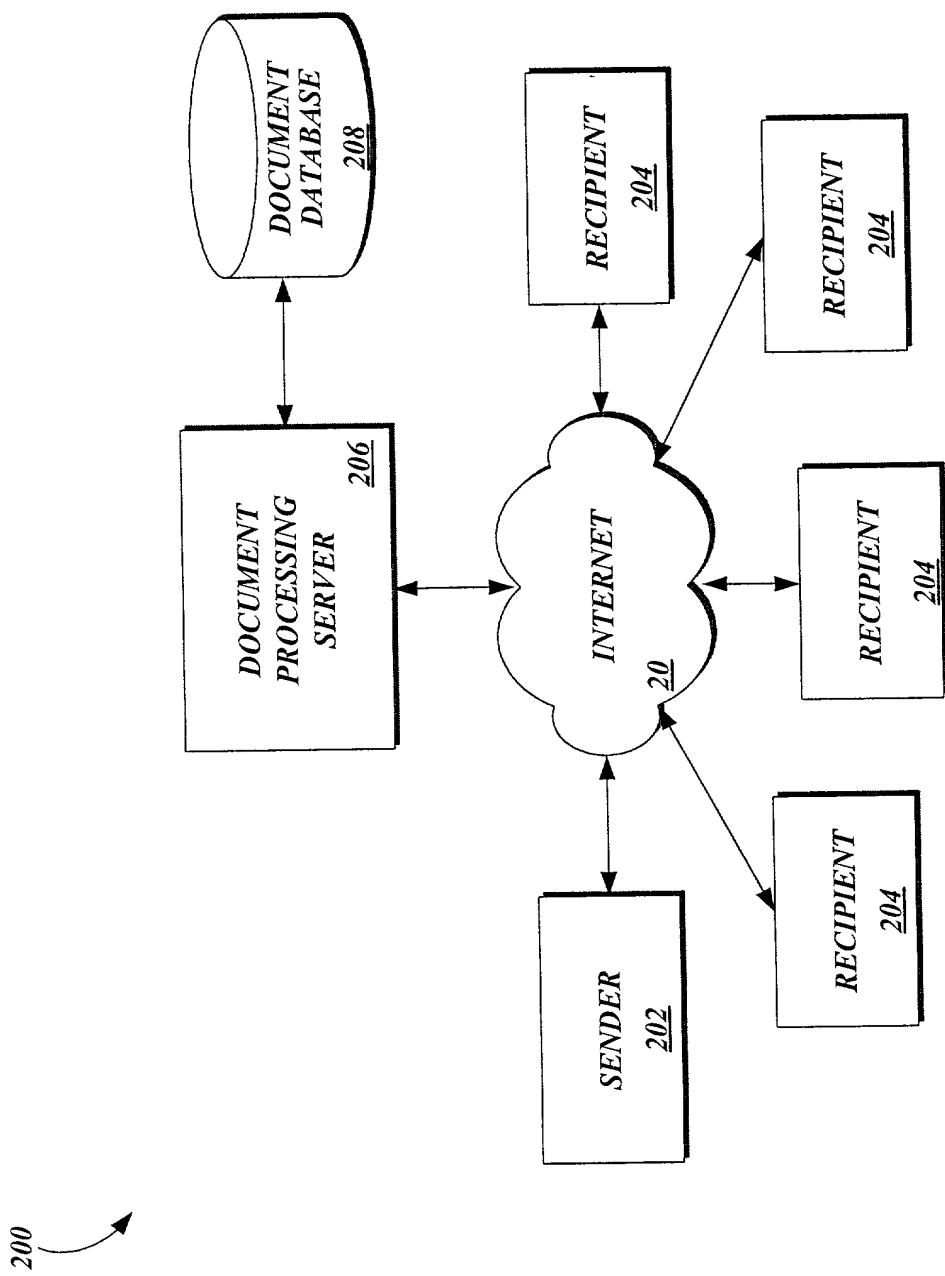Docket No.:   YOZO118402
U.S. Express Mail No.: EL 919767845 US

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DOCUMENT DATABASE 208

DOCUMENT PROCESSING SERVER 206

RECIPIENT 204

INTERNET 20

SENDER 202

(1) DOCUMENT TO BE PROCESSED

(2) DOCUMENT TO BE PROCESSED

(3) NOTIFY RECIPIENT

(4) NOTIFY RECIPIENT

(5) ACCESS VERIFICATION AND ACTION

200

Fig.5.

DOCUMENTS UTILIZING SECURE COMMUNICATIONS
OVER A NETWORK
Inventor: D.A.E. Wall
Docket No.:   YOZO118402
U.S. Express Mail No.: EL 919767845 US

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Fig.6.

DOCUMENTS UTILIZING SECURE COMMUNICATIONS
OVER A NETWORK
Inventor: D.A.E. Wall
Docket No.: YOZO118402
U.S. Express Mail No.: EL 919767845 US

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DOCUMENT DATABASE 208

DOCUMENT PROCESSING SERVER 206

RECIPIENT 204

(11) ACCESS VERIFICATION AND ACTION

RECIPIENT 204

(9) NOTIFY ADDITIONAL RECIPIENT

(10) NOTIFY ADDITIONAL RECIPIENT

INTERNET 20

SENDER 202

200

Fig. 7.

Title: SYSTEM AND METHOD FOR\
DOCUMENTS UTILIZING SECURE COMMUNICATIONS\
OVER A NETWORK\
Inventor: D.A.E. Wall\
Docket No.:   YOZO118402\
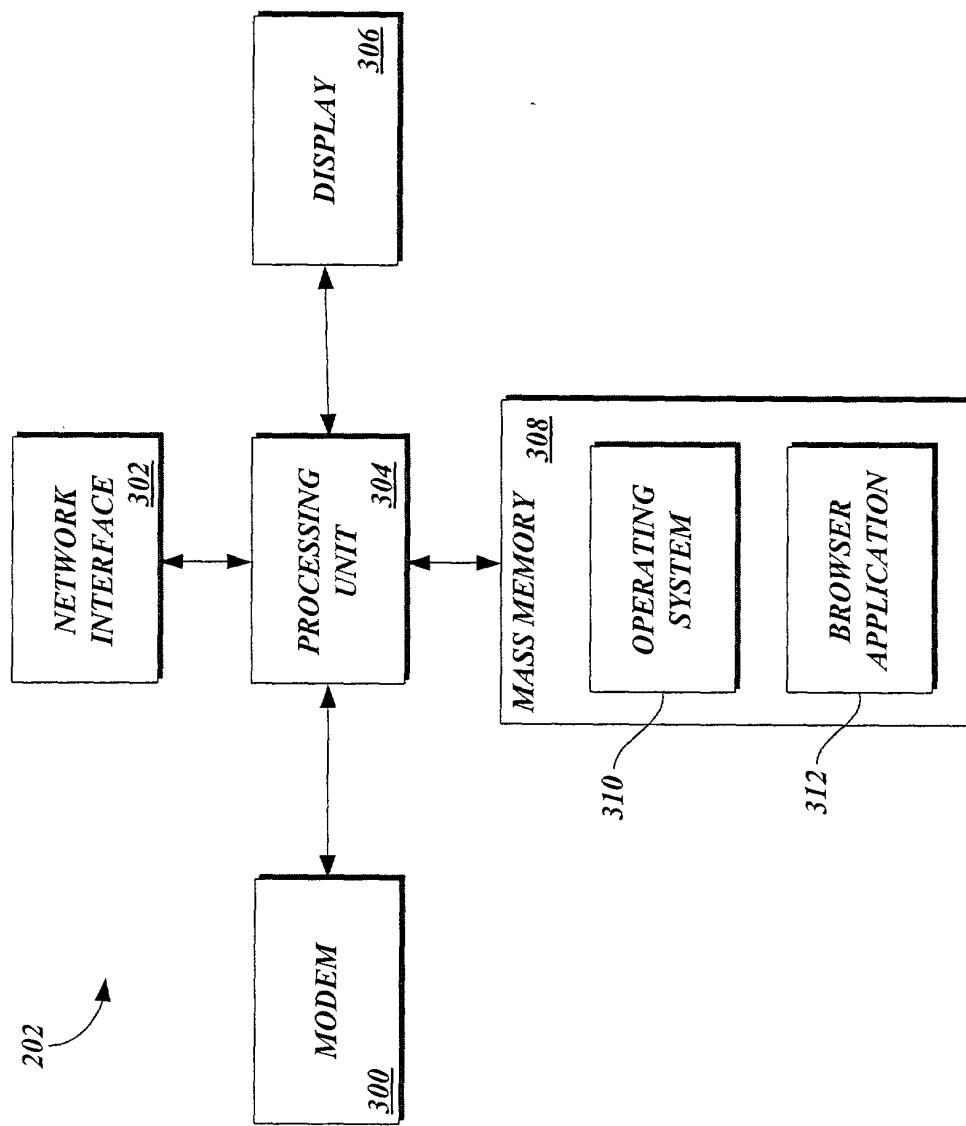U.S. Express Mail No.: EL 919767845 US

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Fig. 8.

Title: SYSTEM AND METHOD FOR PROCESSING DIGITAL
DOCUMENTS UTILIZING SECURE COMMUNICATIONS
OVER A NETWORK
Inventor: D.A.E. Wall
Docket No.:   YOZO118402
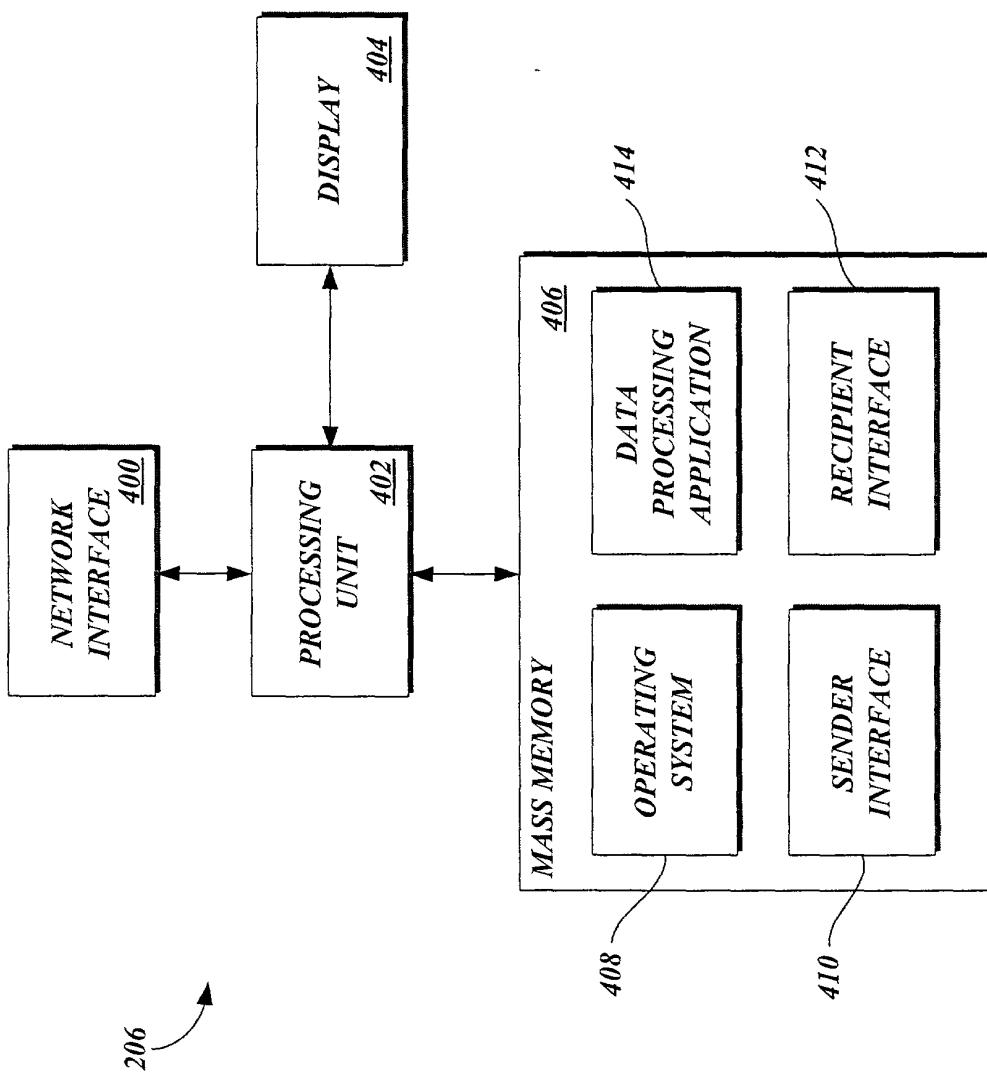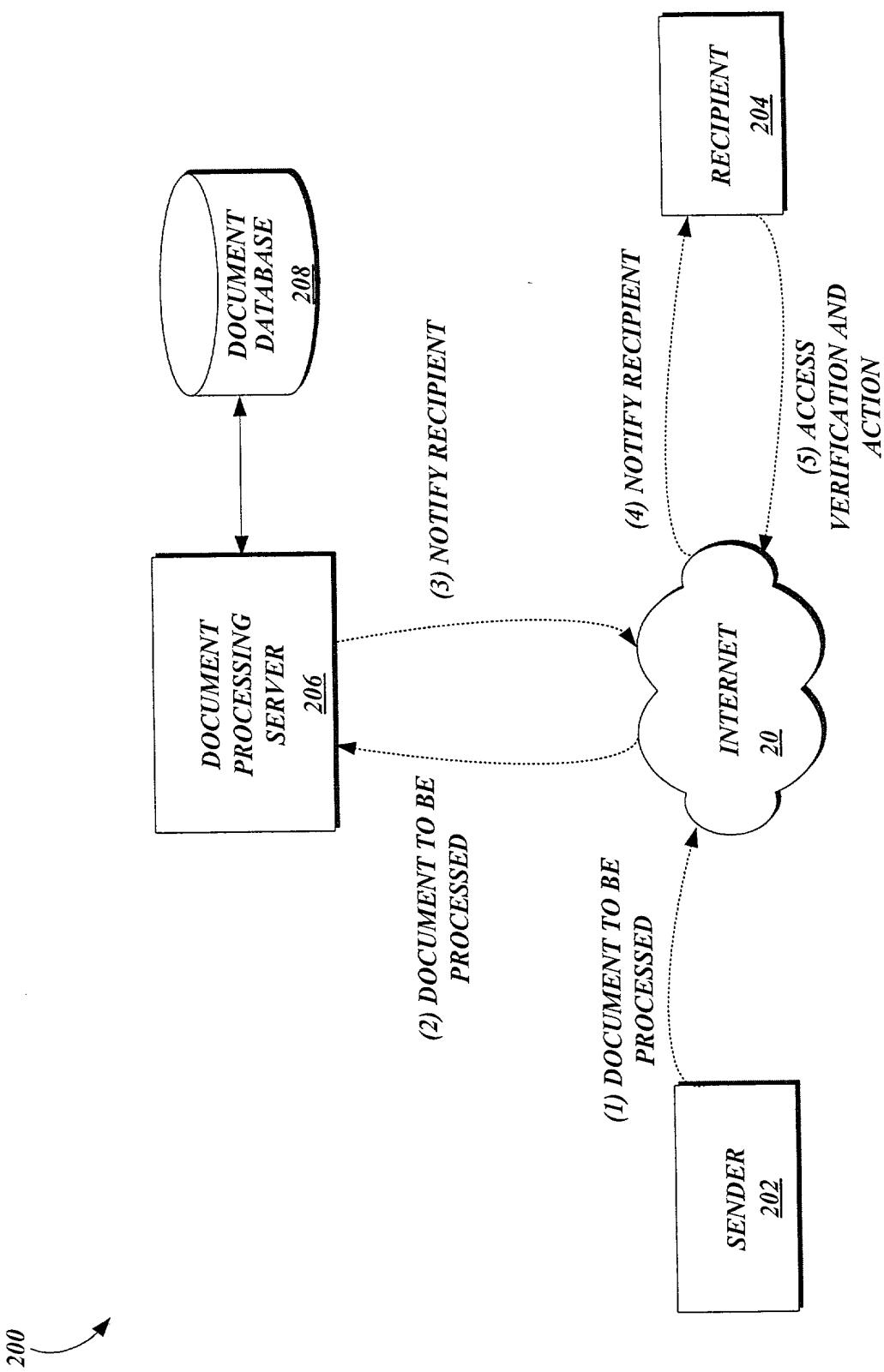U.S. Express Mail No.: EL 919767845 US

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```
        ╭─────────────────────────╮
        │   START DOCUMENT        │ ─── 900
        │   PROCESSING  ROUTINE   │
        ╰─────────────────────────╯
                    │
                    ▼
        ┌─────────────────────────┐
 902 ───│   OBTAIN AND PROCESS     │
        │   DOCUMENT WITH SENDER DATA
        │   (FIG. 10)              │
        └─────────────────────────┘
                    │
                    ▼
        ┌─────────────────────────┐
        │  TRANSMIT PROCESSED DOCUMENT TO  │ ─── 904
        │  ONE OR MORE RECIPIENTS  │
        │  (FIGS. 11A & 11B)       │
        └─────────────────────────┘
                    │
                    ▼
        ┌─────────────────────────┐
        │  PROCESS DOCUMENT WITH   │ ─── 906
        │  ADDITIONAL RECIPIENT DATA
        │  (FIG. 13)               │
        └─────────────────────────┘
                    │
                    ▼
                  ╱────╲
      YES        ╱ ADDITIONAL ╲  ─── 908
     ◄───────────  RECIPIENTS
                  ╲    ?    ╱
                   ╲──────╱
                    │ NO
                    ▼
              ╭───────────╮
              │    END    │ ─── 910
              ╰───────────╯
```
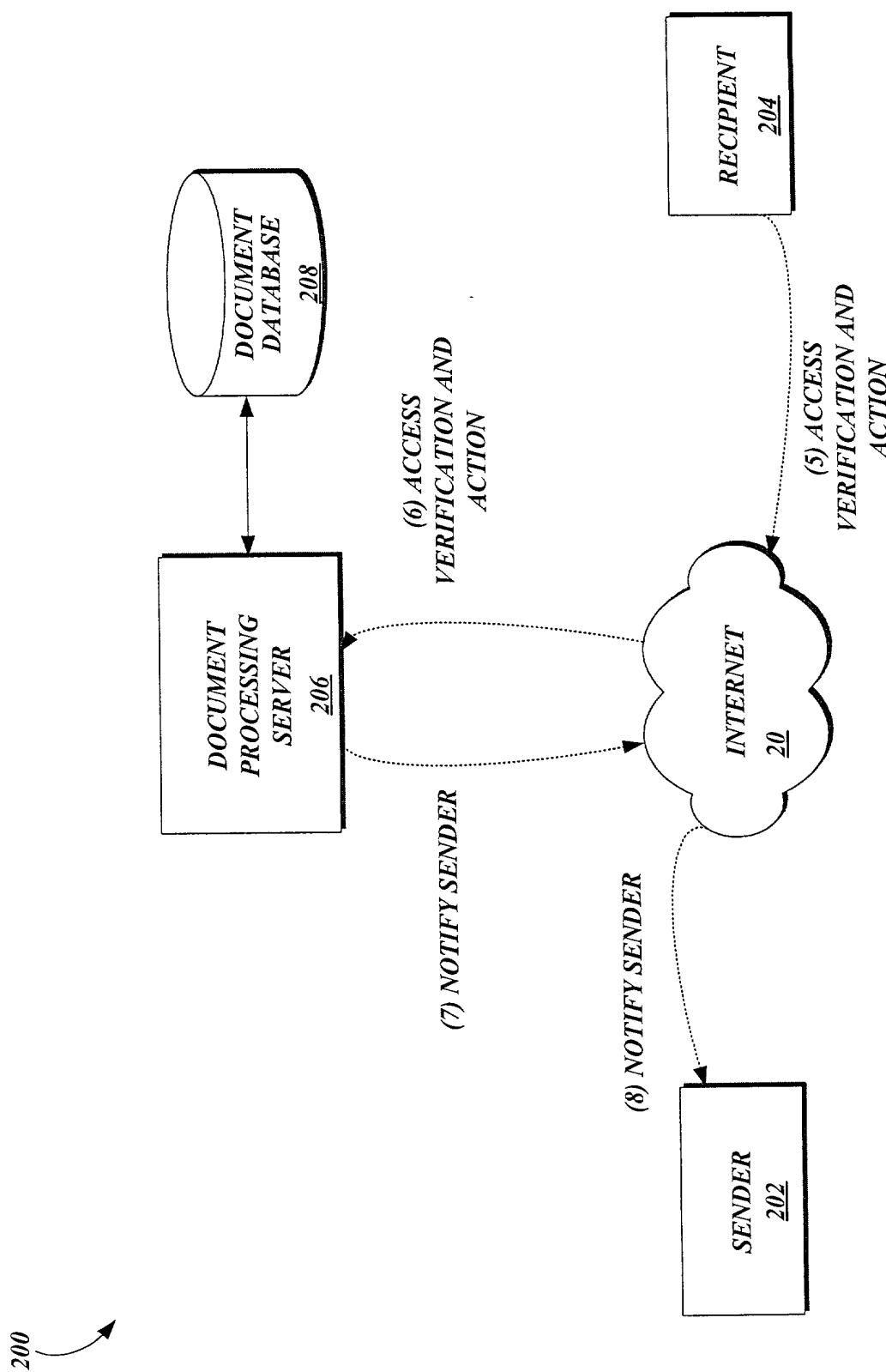
Fig.9.

Title: SYSTEM AND METHOD
DOCUMENTS UTILIZING SECURE COMMUNICATIONS
OVER A NETWORK
Inventor: D.A.E. Wall
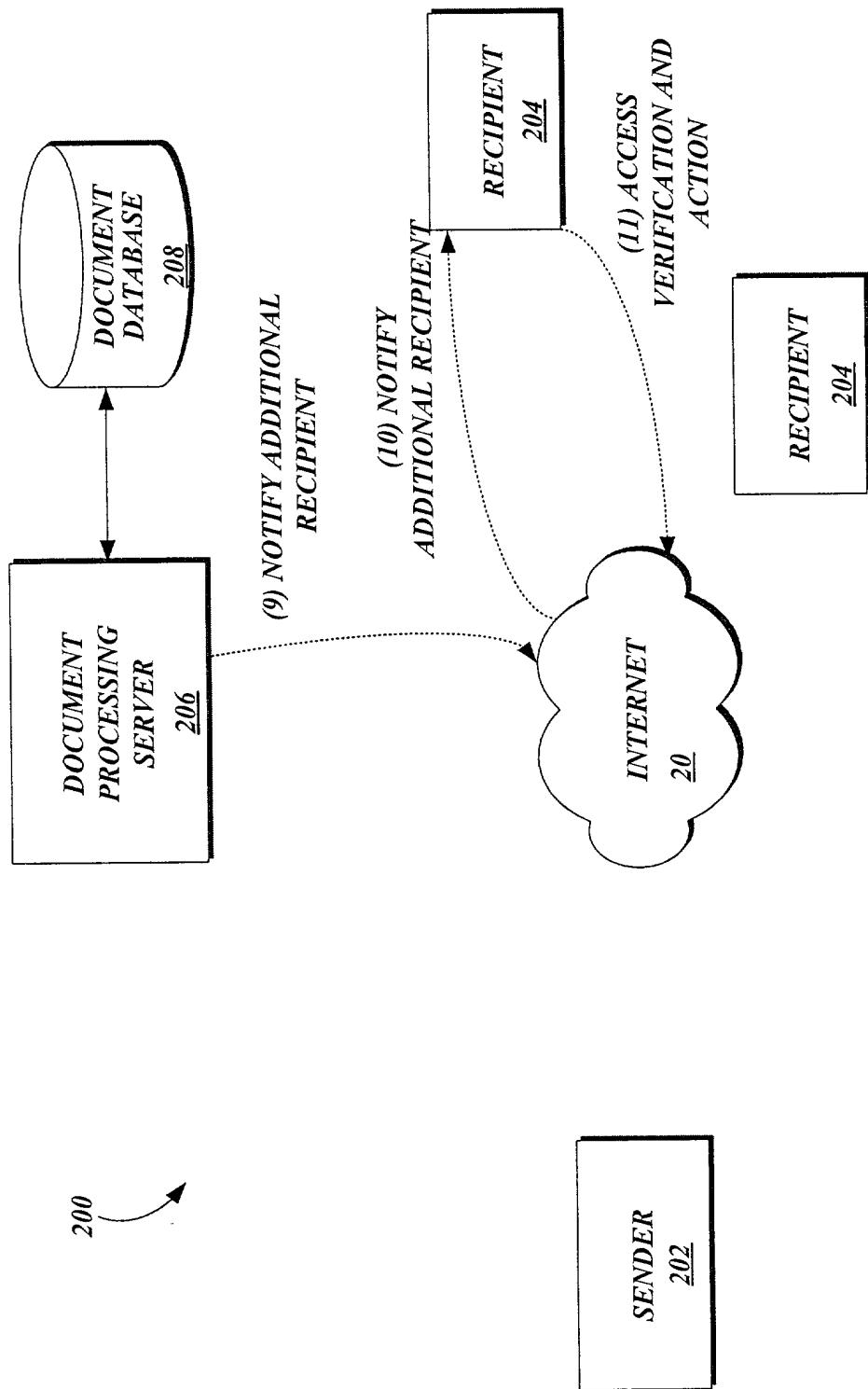Docket No.:   YOZO118402
U.S. Express Mail No.: EL 919767845 US

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```
       ┌────────────────────────────┐
       │ START SENDER DATA DOCUMENT │────── 1000
       │   PROCESSING SUB-ROUTINE   │
       └────────────────────────────┘
                     │
                     ▼
       ┌────────────────────────────┐
       │ OBTAIN SECURE COMMUNICATION │────── 1002
       │ WITH SENDER COMPUTING DEVICE│
       └────────────────────────────┘
```

START SENDER DATA DOCUMENT PROCESSING SUB-ROUTINE — 1000

OBTAIN SECURE COMMUNICATION WITH SENDER COMPUTING DEVICE — 1002

1004 — NEW USER ? — YES → GENERATE NEW USER ENTRY — 1006 → GENERATE ENCRYPTION AND SIGNATURE KEYS FOR NEW USER — 1008

NO

1010 — OBTAIN LIST OF ALL RECIPIENTS AND IDENTITY VERIFICATION STATUS

OBTAIN DOCUMENT TO BE PROCESSED — 1012

1014 — DIGITAL SIGNATURE REQUIRED ? — YES → APPEND ENCRYPTED DIGITAL SIGNATURE — 1016

NO

1018 — ENCRYPT AND STORE PROCESSED DOCUMENT

TERMINATE — 1020

Fig.10.

Title: SYSTEM AND METHOD FOR PROCESSING DIGITAL
DOCUMENTS UTILIZING SECURE COMMUNICATIONS
OVER A NETWORK
Inventor: D.A.E. Wall
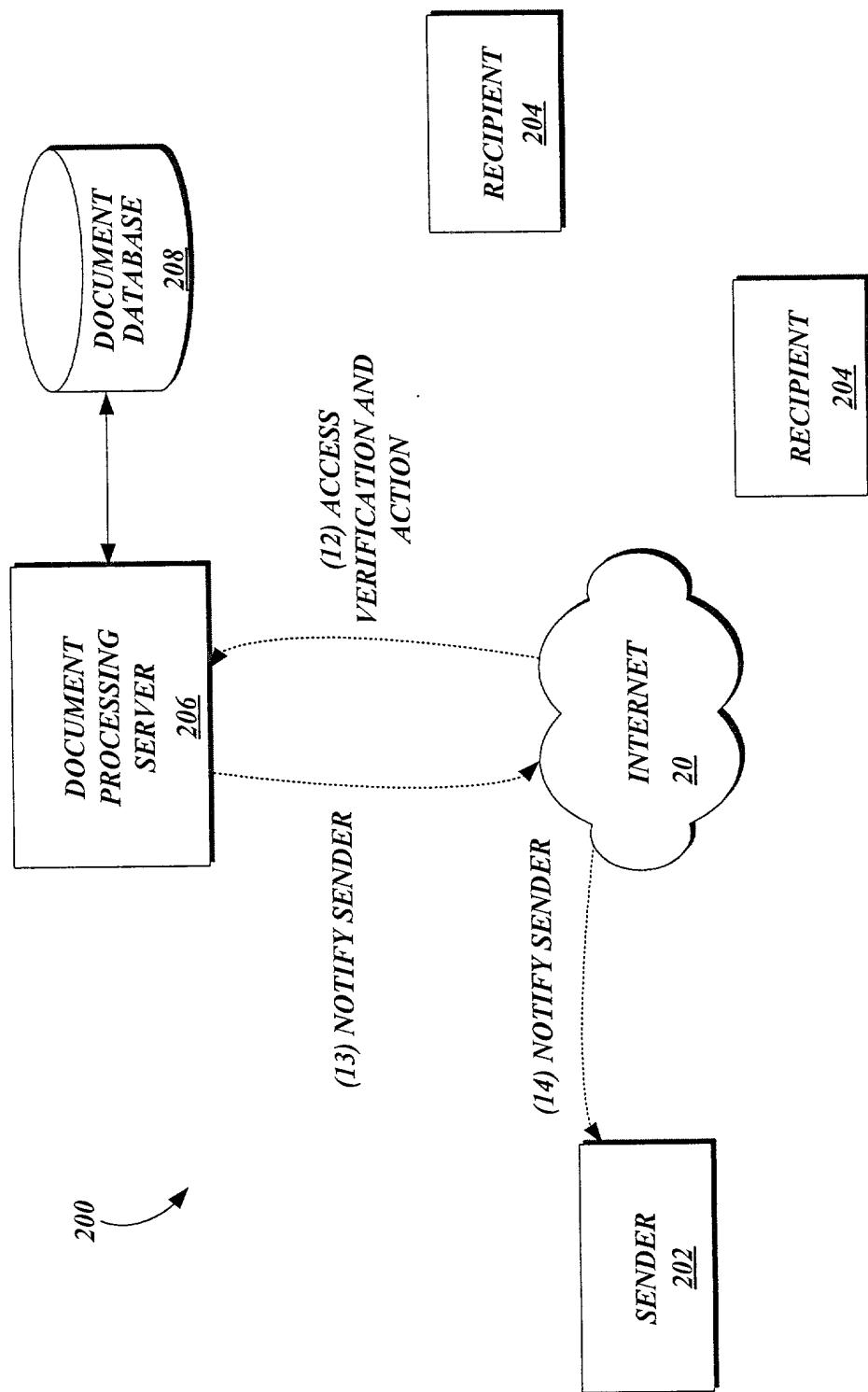Docket No.:   YOZO118402
U.S. Express Mail No.: EL 919767845 US

START RECIPIENT DOCUMENT
REVIEW SUB-ROUTINE — *1100*

OBTAIN RECIPIENT
IDENTIFICATION — *1102*

1104 — NEW USER ?

GENERATE NEW USER ENTRY — *1106*

GENERATE ENCRYPTION AND SIGNATURE KEYS FOR NEW USER — *1108*

1110 — ENCRYPT DOCUMENT WITH RECIPIENT KEYS AND STORE

NOTIFY RECIPIENT — *1112*

OBTAIN SECURE COMMUNICATION WITH RECIPIENT (FIG. 12) — *1114*

DECRYPT DOCUMENT FOR RECIPIENT — *1116*

TRANSFER DOCUMENT TO RECIPIENT — *1118*

RECORD TIMESTAMP — *1120*

A

Fig.11A.

Title: SYSTEM AND METHOD FOR PROC
DOCUMENTS UTILIZING SECURE COMMUNICATIONS
OVER A NETWORK
Inventor: D.A.E. Wall
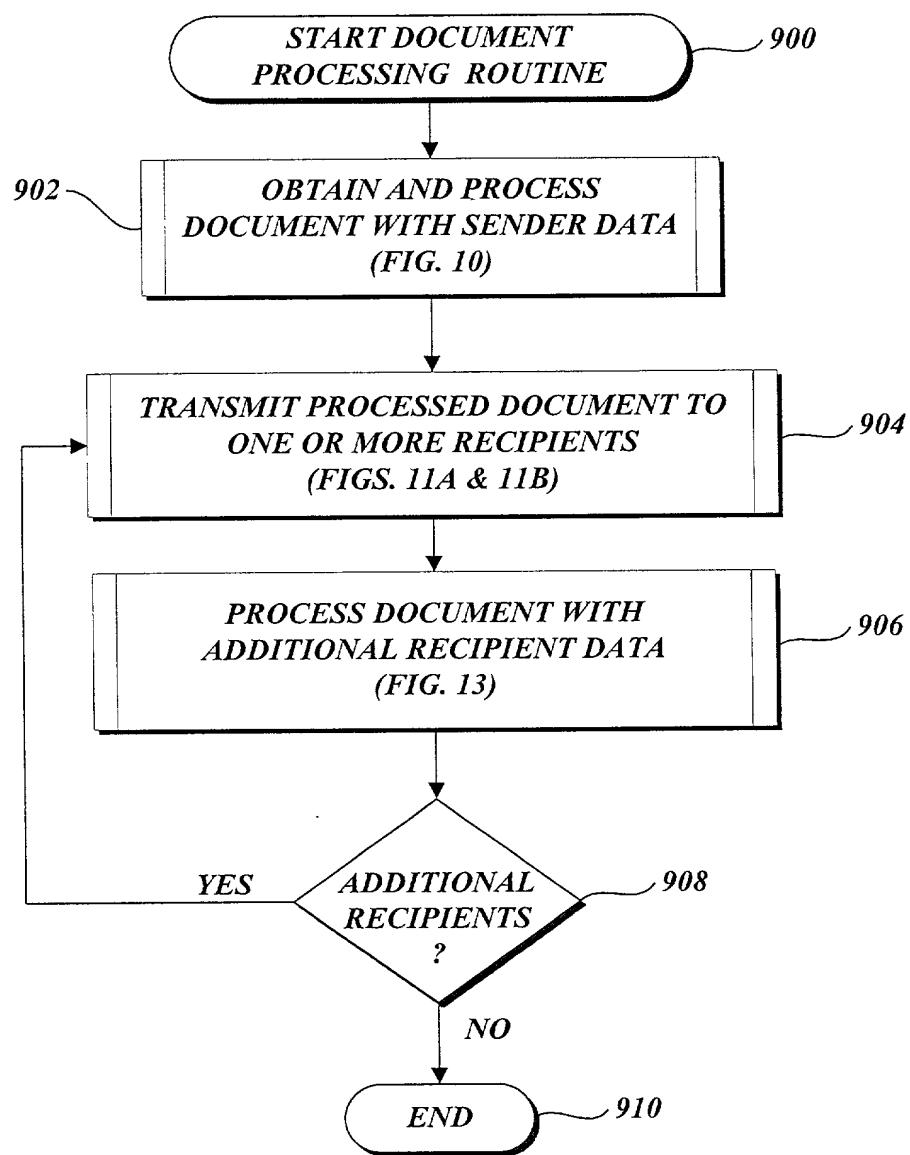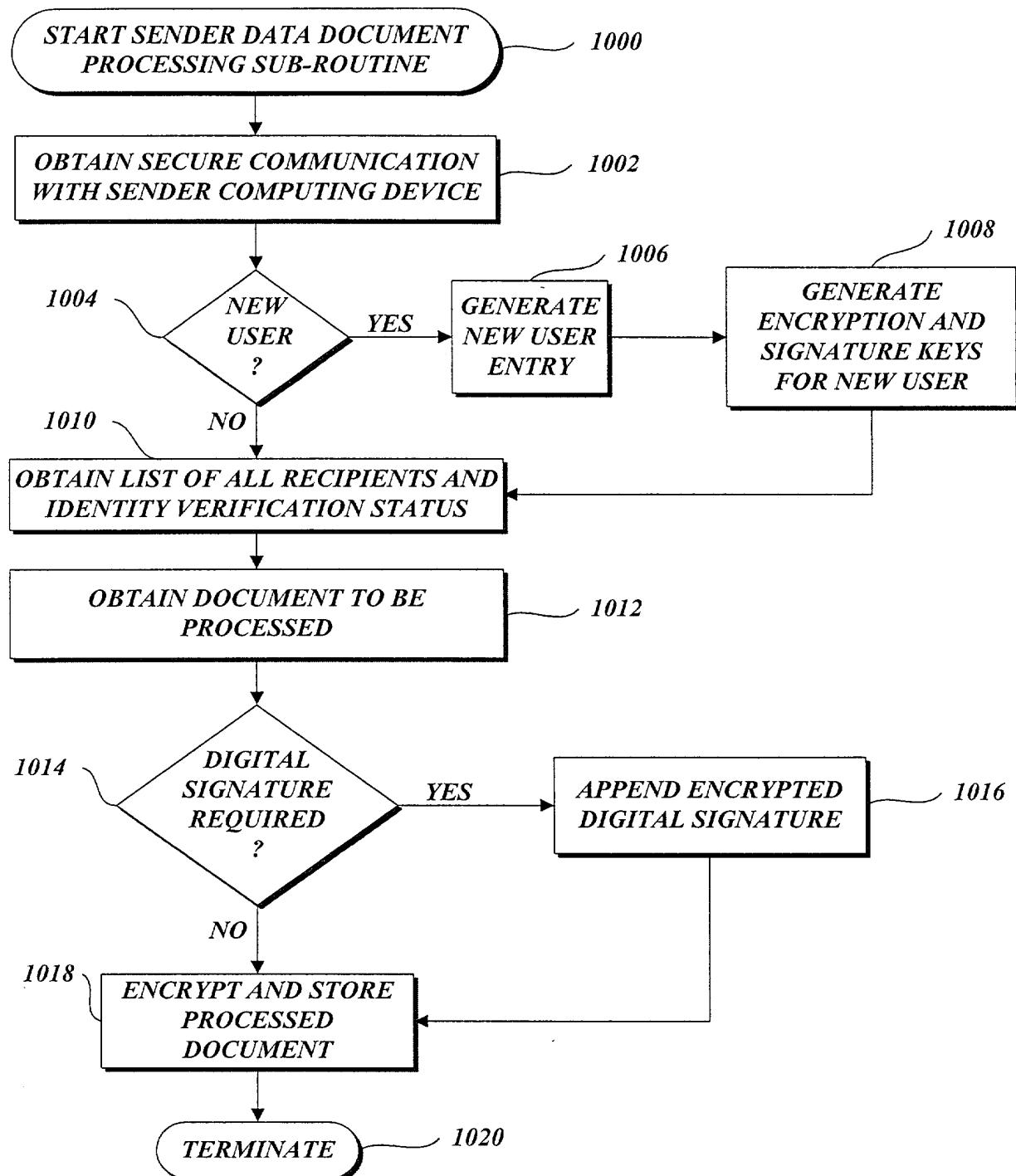Docket No.: YOZO118402
U.S. Express Mail No.: EL 919767845 US

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A

NOTIFY SENDER — 1122

SIGNATURE
VERIFICATION
REQUESTED
?
1124

YES → DYNAMICALLY
GENERATE SIGNATURE
VERIFICATION(S) — 1126

NO

1128 — TERMINATE

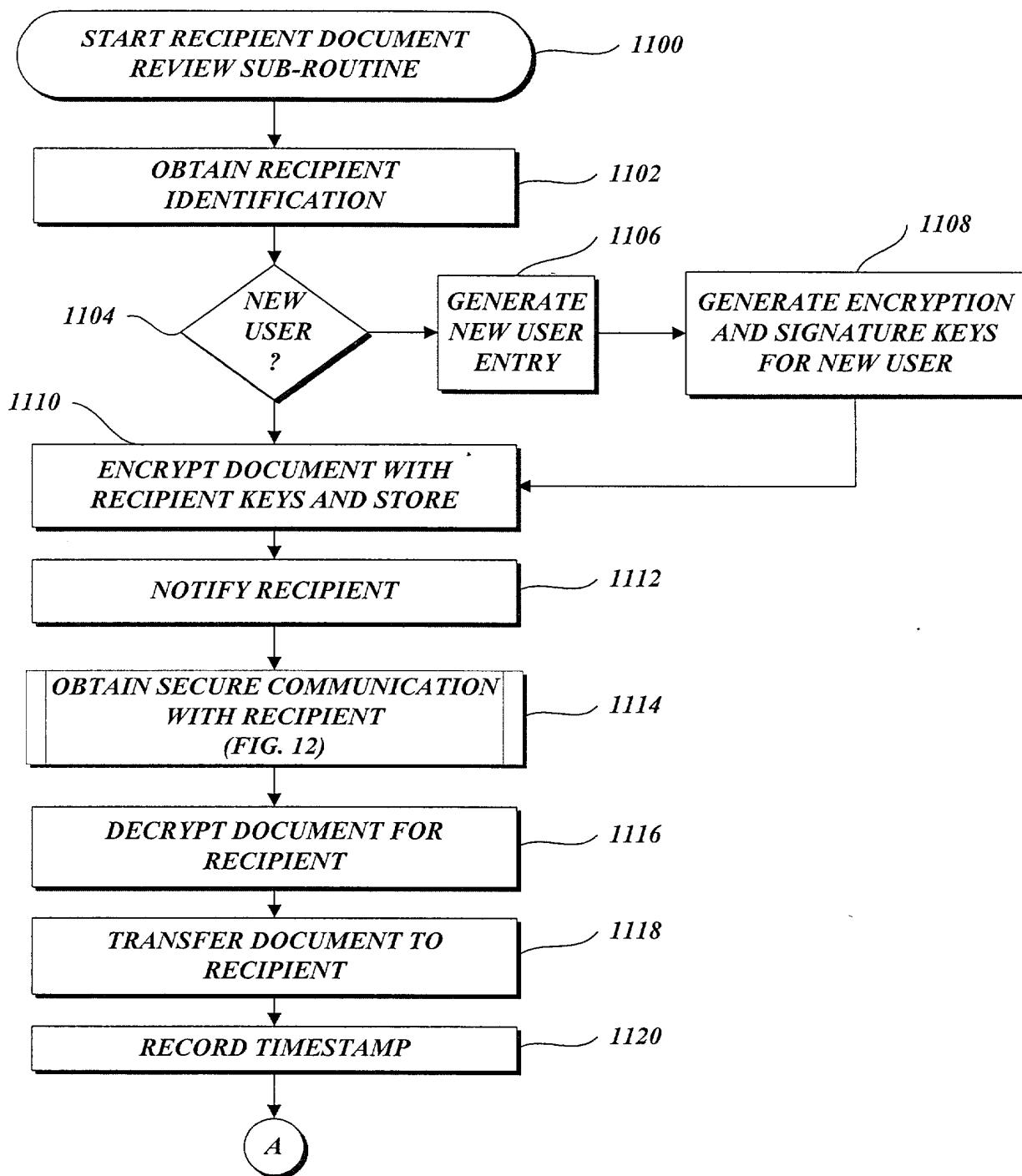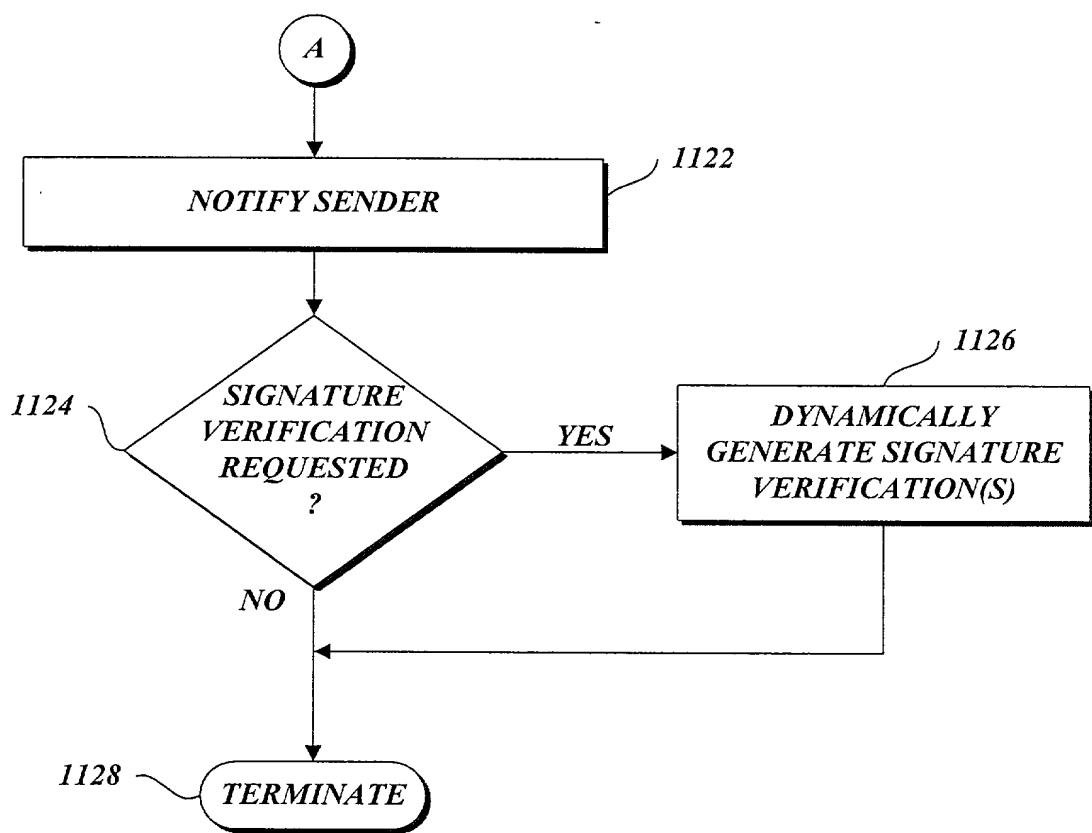*Fig.11B.*

Title: SYSTEM AND METHOD FOR PROCESSING DIGITAL
DOCUMENTS UTILIZING SECURE COMMUNICATIONS
OVER A NETWORK
Inventor: D.A.E. Wall
Docket No.:   YOZO118402
U.S. Express Mail No.: EL 919767845 US

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```
   ┌──────────────────────────────┐
   │   START RECIPIENT SECURE      │ ─── 1200
   │ COMMUNICATION SUB-ROUTINE     │
   └──────────────────────────────┘
                  │
                  ▼
   ┌──────────────────────────────┐
1202 │ OBTAIN COMMUNICATION         │
   │ FROM EMBEDDED                 │
   │ ELECTRONIC MAIL LINK          │
   └──────────────────────────────┘
                  │
                  ▼
            ◇ ADDITIONAL              ┌──────────────────────────┐ ─── 1206
      1204 ◇ VERIFICATION ◇  ── YES ──▶│ OBTAIN ONE OR MORE        │
            ◇ SPECIFIED              │ ADDITIONAL IDENTITY       │
            ◇    ?    ◇              │ VERIFICATIONS             │
                  │                  └──────────────────────────┘
                 NO
                  │
                  ▼
            ┌──────────────┐ ─── 1208
            │  TERMINATE    │
            └──────────────┘
```

Fig.12.

DOCUMENTS UTILIZING SECURE COMMUNICATIONS
OVER A NETWORK
Inventor: D.A.E. Wall
Docket No.:   YOZO118402
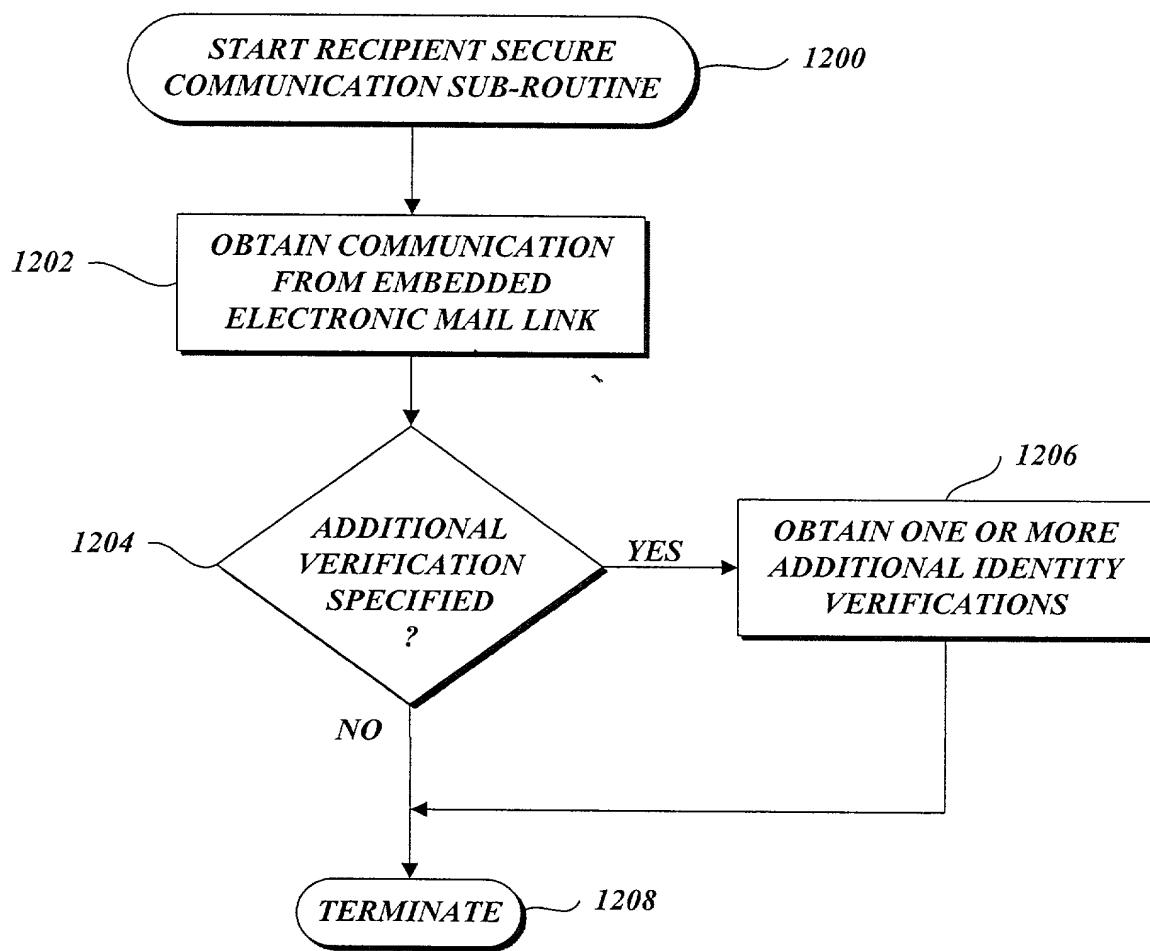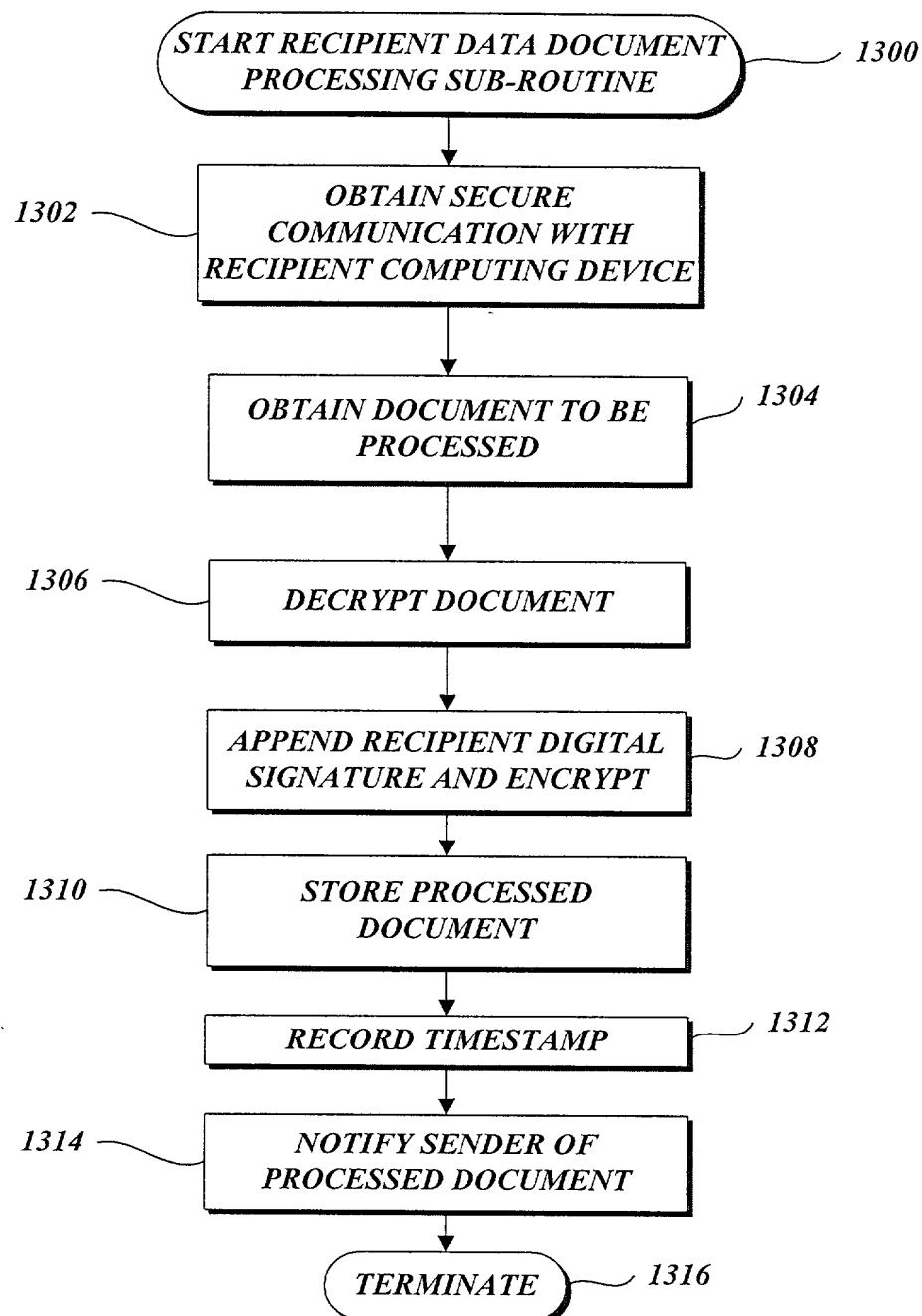U.S. Express Mail No.: EL 919767845 US

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START RECIPIENT DATA DOCUMENT PROCESSING SUB-ROUTINE — *1300*

OBTAIN SECURE COMMUNICATION WITH RECIPIENT COMPUTING DEVICE — *1302*

OBTAIN DOCUMENT TO BE PROCESSED — *1304*

DECRYPT DOCUMENT — *1306*

APPEND RECIPIENT DIGITAL SIGNATURE AND ENCRYPT — *1308*

STORE PROCESSED DOCUMENT — *1310*

RECORD TIMESTAMP — *1312*

NOTIFY SENDER OF PROCESSED DOCUMENT — *1314*

TERMINATE — *1316*

Fig.13.